

Attachment 1

SE Minnesota, N Iowa, SW Wisconsin NCA Project Status from MISO Project Database dated 5/22/2012

6/14/2012

PjID	Geographic Loc	Proj_Name	Target_Appendix	App	ABC	Facil_ID	Expected_ISD	From_Sub	To_Sub	Voltage	Volt_Low	Facility_Desc	Plan_Status	Est_Cost
90	ITCM	Emery-Lime Crk 161kV_Ckt 2	A in MTEP03	A	189	6/1/2007	Emery	Lime Creek		161		New Facility	In Service	\$8,000,000.00
1287	ITCM	Replace Salem 345/161 kV transformer with 448 MVA unit	A in MTEP06	A	2116	7/22/2010	Salem 345/161 kV	transformer		345	161	Larger Xfmr	In Service	\$6,600,000.00
1288	ITCM	Replace Hazleton 345/161 kV transformer #1 with 448 MVA unit	A in MTEP06	A	2117	3/23/2011	Hazleton 345/161	transformer		345	161	Larger Xfmr	In Service	\$5,650,000.00
1340	ITCM	Hazleton - Salem 345 kV line with a 2nd Salem 345/161 kV 448 MVA transformer.	A in MTEP08	A	2973	12/31/2012	Hazleton	345 termination		345		Expand ring bus to a five breaker ring bus (r	Planned	\$1,422,000.00
1340	ITCM	Hazleton - Salem 345 kV line with a 2nd Salem 345/161 kV 448 MVA transformer.	A in MTEP08	A	2974	12/31/2012	Salem	345 termination		345		Expand ring bus to a five breaker ring bus (r	Planned	\$7,790,000.00
1340	ITCM	Hazleton - Salem 345 kV line with a 2nd Salem 345/161 kV 448 MVA transformer.	A in MTEP08	A	4905	12/31/2012	Salem	Hazleton		345		Construct a new 345-161kV dbl ckt line(54 m	Planned	\$110,000,000.00
1340	ITCM	Hazleton - Salem 345 kV line with a 2nd Salem 345/161 kV 448 MVA transformer.	A in MTEP08	A	4906	12/31/2012	Salem	Transformer		345	161	Upgrade Salem 345 sub & add 2nd 345/161kV	Planned	\$5,650,000.00
1340	ITCM	Hazleton - Salem 345 kV line with a 2nd Salem 345/161 kV 448 MVA transformer.	A in MTEP08	A	5388	12/31/2012	Hazleton	Dundee		161		Rebuild the 161kV line to 326 MVA capacity.	Planned	
1340	ITCM	Hazleton - Salem 345 kV line with a 2nd Salem 345/161 kV 448 MVA transformer.	A in MTEP08	A	5389	12/31/2012	Dundee	Liberty		161		Rebuild the 161kV line to 326 MVA capacity.	Planned	
1340	ITCM	Hazleton - Salem 345 kV line with a 2nd Salem 345/161 kV 448 MVA transformer.	A in MTEP08	A	5390	12/31/2012	Liberty	Lore		161		Rebuild a portion of the 161kV line to 326 MVA	Planned	
1340	ITCM	Hazleton - Salem 345 kV line with a 2nd Salem 345/161 kV 448 MVA transformer.	A in MTEP08	A	7257	12/31/2012	Salem	Reactor		345		Install a 345kV 40 Mvar reactor and breaker	Planned	
1340	ITCM	Hazleton - Salem 345 kV line with a 2nd Salem 345/161 kV 448 MVA transformer.	A in MTEP08	A	7258	12/31/2012	Dundee	terminal equipment		161		Relay upgrades	Planned	\$36,000.00
1340	ITCM	Hazleton - Salem 345 kV line with a 2nd Salem 345/161 kV 448 MVA transformer.	A in MTEP08	A	7259	12/31/2012	Liberty	terminal equipment		161		Relay upgrades	Planned	\$36,000.00
1342	ITCM	Coffey (Lewis Fields) 161 kV substation which taps Swamp Fox - Coggon 115 kV line	A in MTEP06	A	2208	12/31/2014	Coffey (Lewis Fields)	Hiawatha		161		Construct a new 161kV line (~ 9 miles) from	Planned	\$16,080,360.00
1342	ITCM	Coffey (Lewis Fields) 161 kV substation which taps Swamp Fox - Coggon 115 kV line	A in MTEP06	A	2209	12/31/2014	Coffey (Lewis Fields)	transformer		161	115	Construct a new Coffey (formerly Lewis Field	Planned	\$2,500,000.00
1342	ITCM	Coffey (Lewis Fields) 161 kV substation which taps Swamp Fox - Coggon 115 kV line	A in MTEP06	A	4902	12/31/2014	Hiawatha	new 161 kV line termin		161		Add 161 kV breaker & associated equipment	Planned	\$1,200,000.00
1342	ITCM	Coffey (Lewis Fields) 161 kV substation which taps Swamp Fox - Coggon 115 kV line	A in MTEP06	A	5632	12/31/2014	Coffey (Lewis Fields)	new 161-115 kV Subst		161	115	Construct a new Coffey (formerly Lewis Field	Planned	\$4,340,000.00
1342	ITCM	Coffey (Lewis Fields) 161 kV substation which taps Swamp Fox - Coggon 115 kV line	A in MTEP06	A	5633	12/31/2014	Coffey (Lewis Fields)	SwampFox		115		Install new 115 kV line terminal to Swamp F	Planned	\$0.00
1342	ITCM	Coffey (Lewis Fields) 161 kV substation which taps Swamp Fox - Coggon 115 kV line	A in MTEP06	A	7253	12/31/2014	Coffey (Lewis Fields)	Coggon		115		Install new 161 kV line terminal to Coggon(S	Planned	\$0.00
1346	ITCM	Upgrade conductor inside the substation so the ratings of Rock Creek 345/161 kV transformer are 448 MVA limited by transformer	A in MTEP08	A	2214	6/1/2010	Rock Creek	transformer		345	161	upgrade limiting equipment	In Service	\$13,400.00
1349	CIPCO	Replace Dundee 161/115 kV transformer with new ratings as 112/112 MVA		A	2218	6/1/2011	Dundee	transformer		161	115	replace transformer	Planned	\$100,000.00
1618	ITCM	Heron Lake-Lakefield 161kV Ckt 1 Rebuild	A in MTEP08	A	2720	6/1/2013	Heron Lake	Lakefield Jct		161		Rebuild	Planned	\$14,000,000.00
1746	ITCM	Lakefield-Adams 161 kV Rebuild	B in MTEP10	B	3549	12/31/2014	Fox Lake	Rutland		161		Rebuild existing line	Proposed	\$11,900,000.00
1746	ITCM	Lakefield-Adams 161 kV Rebuild	B in MTEP10	B	3550	12/31/2015	Rutland	Winnebago		161		Rebuild existing line	Proposed	\$10,220,000.00
1746	ITCM	Lakefield-Adams 161 kV Rebuild	B in MTEP10	B	3551	12/31/2017	Lakefield Jct	Fox		161		Rebuild existing line	Proposed	\$15,610,000.00
1746	ITCM	Lakefield-Adams 161 kV Rebuild	B in MTEP10	B	3552	12/31/2016	Winnebago	Hayward		161		Rebuild existing line	Proposed	\$34,370,000.00
1746	ITCM	Lakefield-Adams 161 kV Rebuild	B in MTEP10	B	3553	12/31/2018	Hayward	Adams		161		Rebuild existing line	Proposed	\$25,480,000.00

9 projects

4 in service

P1746 Lakefield - Adams 161 kV rebuild project is effectively replaced (from NCA perspective) by P3205 and P3213 Multi-Value Projects in southern MN and northern Iowa

PjID	Geographic Loc	Proj_Name	Target_Appendix	AppABC	Facil_ID	Expected_ISD	From_Sub	To_Sub	Voltage	Volt_Low	Facility_Desc	Plan_Status	Est_Cost
3205	MEC, ITCM	Proposed MVP Portfolio 1: Lakefield Jct. - Winnebago - Winco - Burt area & Sheldon - Burt Area - Webster 345 kV line	A in MTEP11	A	5951	12/1/2016	Sheldon	Webster	345		Sheldon to Webster 345/161 kV double ckt li	Planned	\$231,261,000.00
3205	MEC, ITCM	Proposed MVP Portfolio 1: Lakefield Jct. - Winnebago	A in MTEP11	A	5990	12/1/2016	Sheldon		345		New Sheldon three-way 345 kV Switching S	Planned	\$10,450,000.00
3205	MEC, ITCM	Proposed MVP Portfolio 1: Lakefield Jct. - Winnebago	A in MTEP11	A	6520	12/31/2015	Winnebago	Substation	345	161	Construct a new sub with a 345kV ring bus wi	Planned	\$27,360,000.00
3205	MEC, ITCM	Proposed MVP Portfolio 1: Lakefield Jct. - Winnebago	A in MTEP11	A	6521	12/31/2015	Winnebago	transformer	345	161	Add a 345/161kV TRF	Planned	\$0.00
3205	MEC, ITCM	Proposed MVP Portfolio 1: Lakefield Jct. - Winnebago	A in MTEP11	A	6522	12/31/2015	Lakefield	Winnebago	345		Construct 345-161kV double circuit	Planned	\$119,337,438.00
3205	MEC, ITCM	Proposed MVP Portfolio 1: Lakefield Jct. - Winnebago	A in MTEP11	A	6523	12/31/2015	Lakefield	Fox Lake	161		Retire existing 161kV H frame circuit	Planned	\$1,155,888.00
3205	MEC, ITCM	Proposed MVP Portfolio 1: Lakefield Jct. - Winnebago	A in MTEP11	A	6524	12/31/2015	Lakefield	Fox Lake	161		Construct 345-161kV double circuit	Planned	\$0.00
3205	MEC, ITCM	Proposed MVP Portfolio 1: Lakefield Jct. - Winnebago	A in MTEP11	A	6525	12/31/2015	Fox Lake	Rutland	161		Construct 345-161kV double circuit	Planned	\$0.00
3205	MEC, ITCM	Proposed MVP Portfolio 1: Lakefield Jct. - Winnebago	A in MTEP11	A	6526	12/31/2015	Lakefield Jct. - Winnebago	Winnebago	161		Construct 345-161kV double circuit	Planned	\$0.00
3205	MEC, ITCM	Proposed MVP Portfolio 1: Lakefield Jct. - Winnebago	A in MTEP11	A	6527	12/31/2015	Fox Lake	Rutland	161		Retire existing 161kV H frame circuit	Planned	\$804,097.00
3205	MEC, ITCM	Proposed MVP Portfolio 1: Lakefield Jct. - Winnebago	A in MTEP11	A	6528	12/31/2015	Rutland	Winnebago	161		Retire existing 161kV H frame circuit	Planned	\$804,097.00
3205	MEC, ITCM	Proposed MVP Portfolio 1: Lakefield Jct. - Winnebago	A in MTEP11	A	6529	12/31/2015	Lakefield	Substation	345		Add a 345kV terminal at Lakefield including 2	Planned	\$5,000,000.00
3205	MEC, ITCM	Proposed MVP Portfolio 1: Lakefield Jct. - Winnebago	A in MTEP11	A	6530	12/31/2015	Winco West	substation	345		Construct a new Winco West 3-terminal 34	Planned	\$10,980,000.00
3205	MEC, ITCM	Proposed MVP Portfolio 1: Lakefield Jct. - Winnebago	A in MTEP11	A	6531	12/31/2015	Winnebago	Winco West	345		Construct 345-161kV double circuit	Planned	\$47,734,975.00
3205	MEC, ITCM	Proposed MVP Portfolio 1: Lakefield Jct. - Winnebago	A in MTEP11	A	6532	12/31/2015	Winnebago	Winco West	161		Retire existing 161kV H frame circuit	Planned	\$1,105,632.00
3205	MEC, ITCM	Proposed MVP Portfolio 1: Lakefield Jct. - Winnebago	A in MTEP11	A	6533	12/31/2015	Winco West	Burt	345		Construct 345kV circuit	Planned	\$41,225,660.00
3205	MEC, ITCM	Proposed MVP Portfolio 1: Lakefield Jct. - Winnebago	A in MTEP11	A	6534	12/31/2015	Winco	Fairbault Co	161		Construct 345-161kV double circuit	Planned	\$0.00
3205	MEC, ITCM	Proposed MVP Portfolio 1: Lakefield Jct. - Winnebago	A in MTEP11	A	6535	12/31/2015	Winnebago	Fairbault Co	161		Construct 345-161kV double circuit	Planned	\$0.00
3205	MEC, ITCM	Proposed MVP Portfolio 1: Lakefield Jct. - Winnebago	A in MTEP11	A	6560	12/1/2016	Webster		345		New terminal at Webster for Sheldon - Webs	Planned	\$6,401,000.00
3205	MEC, ITCM	Proposed MVP Portfolio 1: Lakefield Jct. - Winnebago	A in MTEP11	A	6561	12/1/2016	Burt		345		New three-way 345 kV Switching Station ne	Planned	\$10,450,000.00
3213	MEC, ITCM	Proposed MVP Portfolio 1 - Winco to Hazelton 345 kV line	A in MTEP11	A	5991	12/31/2015	Blackhawk	Hazleton	345		Construct 345-161kV double circuit	Planned	\$23,866,416.00
3213	MEC, ITCM	Proposed MVP Portfolio 1 - Winco to Hazelton 345 kV line	A in MTEP11	A	5992	12/1/2015	Black Hawk	Black Hawk	345	161	Black Hawk 345-161 kV substation with 560	Planned	\$15,019,000.00
3213	MEC, ITCM	Proposed MVP Portfolio 1 - Winco to Hazelton 345 kV line	A in MTEP11	A	6424	12/1/2015	Franklin	Butler	161		Rebuild Franklin-Butler 161 kV line.	Planned	
3213	MEC, ITCM	Proposed MVP Portfolio 1 - Winco to Hazelton 345 kV line	A in MTEP11	A	6425	12/1/2015	Butler	Union Tap	161		Rebuild Butler-Union Tap 161 kV line.	Planned	
3213	MEC, ITCM	Proposed MVP Portfolio 1 - Winco to Hazelton 345 kV line	A in MTEP11	A	6426	12/1/2015	Union Tap	Black Hawk	161		Rebuild Union Tap-Black Hawk 161 kV line.	Planned	
3213	MEC, ITCM	Proposed MVP Portfolio 1 - Winco to Hazelton 345 kV line	A in MTEP11	A	6427	12/1/2015	Black Hawk	Hazleton	161		Rebuild Black Hawk-Hazleton 161 kV line.	Planned	
3213	MEC, ITCM	Proposed MVP Portfolio 1 - Winco to Hazelton 345 kV line	A in MTEP11	A	6536	12/31/2015	Winco West	Lime Creek	345		Construct 345-161kV double circuit	Planned	\$132,356,067.00
3213	MEC, ITCM	Proposed MVP Portfolio 1 - Winco to Hazelton 345 kV line	A in MTEP11	A	6537	12/31/2015	Lime Creek	Worth County	161		Construct 345-161kV double circuit	Planned	\$0.00
3213	MEC, ITCM	Proposed MVP Portfolio 1 - Winco to Hazelton 345 kV line	A in MTEP11	A	6538	12/31/2015	Winco West	Winco	161		Retire existing 161kV H frame circuit	Planned	\$804,096.00
3213	MEC, ITCM	Proposed MVP Portfolio 1 - Winco to Hazelton 345 kV line	A in MTEP11	A	6539	12/31/2015	Worth County	Lime Creek tap	161		Retire existing 161kV H frame circuit	Planned	\$251,280.00
3213	MEC, ITCM	Proposed MVP Portfolio 1 - Winco to Hazelton 345 kV line	A in MTEP11	A	6540	12/31/2015	Lime Creek tap	Lime Creek	161		Retire existing 161kV H frame circuit	Planned	\$226,152.00
3213	MEC, ITCM	Proposed MVP Portfolio 1 - Winco to Hazelton 345 kV line	A in MTEP11	A	6541	12/31/2015	Lime Creek	Substation	345	161	Construct a new sub with a 345kV ring bus wi	Planned	\$18,930,000.00
3213	MEC, ITCM	Proposed MVP Portfolio 1 - Winco to Hazelton 345 kV line	A in MTEP11	A	6542	12/31/2015	Lime Creek	transformer	345	161	Add a 345/161kV TRF	Planned	\$0.00
3213	MEC, ITCM	Proposed MVP Portfolio 1 - Winco to Hazelton 345 kV line	A in MTEP11	A	6543	12/31/2015	Emery	Substation	345	161	Construct a new sub with a 345kV ring bus wi	Planned	\$19,380,000.00
3213	MEC, ITCM	Proposed MVP Portfolio 1 - Winco to Hazelton 345 kV line	A in MTEP11	A	6544	12/31/2015	Emery	transformer	345	161	Add a 345/161kV TRF	Planned	\$0.00
3213	MEC, ITCM	Proposed MVP Portfolio 1 - Winco to Hazelton 345 kV line	A in MTEP11	A	6545	12/31/2015	Lime Creek	Emery	345		Construct 345-161kV double circuit	Planned	\$34,716,345.00
3213	MEC, ITCM	Proposed MVP Portfolio 1 - Winco to Hazelton 345 kV line	A in MTEP11	A	6546	12/31/2015	Lime Creek	Emery	161		Construct 345-161kV double circuit	Planned	\$0.00
3213	MEC, ITCM	Proposed MVP Portfolio 1 - Winco to Hazelton 345 kV line	A in MTEP11	A	6547	12/31/2015	Lime Creek	Emery	161		Retire existing 161kV H frame circuit	Planned	\$804,096.00
3213	MEC, ITCM	Proposed MVP Portfolio 1 - Winco to Hazelton 345 kV line	A in MTEP11	A	6548	12/31/2015	Emery	Blackhawk	345		Construct 345-161kV double circuit	Planned	\$57,677,172.00
3213	MEC, ITCM	Proposed MVP Portfolio 1 - Winco to Hazelton 345 kV line	A in MTEP11	A	6549	12/31/2015	Emery	Blackhawk	161		Construct 345-161kV double circuit and trans	Planned	\$0.00
3213	MEC, ITCM	Proposed MVP Portfolio 1 - Winco to Hazelton 345 kV line	A in MTEP11	A	6550	12/31/2015	Emery	Blackhawk	161		Retire existing 161kV H frame circuit	Planned	\$1,457,424.00
3213	MEC, ITCM	Proposed MVP Portfolio 1 - Winco to Hazelton 345 kV line	A in MTEP11	A	6551	12/31/2015	Blackhawk	Hazleton	161		Construct 345-161kV double circuit	Planned	\$0.00
3213	MEC, ITCM	Proposed MVP Portfolio 1 - Winco to Hazelton 345 kV line	A in MTEP11	A	6552	12/31/2015	Blackhawk	Hazleton	161		Retire existing 161kV H frame circuit	Planned	\$603,072.00
3213	MEC, ITCM	Proposed MVP Portfolio 1 - Winco to Hazelton 345 kV line	A in MTEP11	A	6553	12/31/2015	Hazleton	Substation	345	161	Convert the 345kV ring bus to a breaker and	Planned	\$14,200,000.00
3213	MEC, ITCM	Proposed MVP Portfolio 1 - Winco to Hazelton 345 kV line	A in MTEP11	A	6557	12/31/2015	Blackhawk	Emery	345		Blackhawk - Emery 345/161 kV double circu	Planned	\$124,122,070.00